# RAISING ACHIEVEMENT AND CLOSING GAPS BETWEEN GROUPS: 

Lessons from Schools and Districts on the Performance Frontier

Nevada Association of School Boards
Reno, Nevada
November, 2011

## First, some good news.

After more than a decade of fairly flat achievement and stagnant or growing gaps, we appear to be turning the corner.

## $4^{\text {th }}$ Grade Reading:

Record Performance with Gap Narrowing
9 Year Olds - NAEP Reading

*Denotes previous assessment format
Source: NAEP 2008 Trends in Academic Progress, NCES

*Denotes previous assessment format
Source: NAEP 2008 Trends in Academic Progress, NCES

## $8^{\text {th }}$ Grade Reading: Recent Gap Narrowing for Blacks, Less for Latinos

13 Year Olds - NAEP Reading


Source: NAEP 2008 Trends in Academic Progress, NCES

## $8^{\text {th }}$ Grade Math: Progress for All Groups, Some Gap Narrowing


*Denotes previous assessment format
Source: NAEP 2008 Trends in Academic Progress, NCES

# Same pattern on Main NAEP exams. 



All groups have improved since 1990, but gaps between groups remain wide

## National Public - Grade 4 NAEP Math



## Over the last decade, all groups have steadily improved and gaps have narrowed

National Public - Grade 8 NAEP Math


## Some gap-closing over last decade

National Public - Grade 4 NAEP Reading


## Some gap closing over the last decade



## Some states making even bigger progress...

## NAEP Grade 4 Reading Latino Students

## States with the Biggest Gains in Mean Scale Scores <br> (2003-2011)

| State | Gain |
| :--- | :--- |
| Maryland | 11 |
| Massachusetts | 14 |
| Georgia | 13 |
| Nevada | 11 |
| New Hampshire | 11 |

## NAEP Grade 8 Math Latino Students

## States with the Biggest Gains in Mean Scale Scores <br> (2003-2011)

| State | Gain |
| :--- | :--- |
| Arkansas | 24 |
| Massachusetts | 18 |
| Delaware | 17 |
| Idaho | 16 |
| Nevada | 16 |
| Pennsylvania | 16 |
| Rhode Island | 16 |
| Texas | 16 |

Note: On average, mean scale scores in math for Latino eighth-grade students increased by 11 points from 2003 to 2011. Source: National Center for Education Statistics, NAEP Data


## Bottom Line:

When we really focus on something, we make progress!

Clearly, much more remains to be done in elementary and middle school

Too many youngsters still enter high school way behind.

# But at least we have some traction on elementary and middle school problems. 

The same is NOT true of our high schools.

## Achievement Flat in Reading

## 17 Year Olds Overall - NAEP



## Math achievement flat over time



* Denotes previous assessment format

Source: National Center for Education Statistics, NAEP 2008 Trends in Academic Progress

# And gaps between groups are mostly wider today than in late eighties, early nineties 

## $12^{\text {th }}$ Grade Reading: No Progress, Gaps Wider than 1988



Source: NAEP 2008 Trends in Academic Progress, NCES

## 12 Grade Math: Results Mostly Flat Gaps Same or Widening


*Denotes previous assessment format
Source: NAEP 2008 Trends in Academic Progress, NCES

And no matter how you cut the data, our students aren't doing well compared to their peers in other countries.

## Of 34 OECD Countries, U.S.A. Ranks $12^{\text {th }}$ in Reading Literacy

2009 PISA - Reading


## Of 34 OECD Countries, U.S.A. Ranks $17^{\text {th }}$ in Science 2009 PISA - Science

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$\square$ Higher than U.S. average $\square$ Not measurably different from U.S. average $\square$ Lower than U.S. average

## Of 34 OECD Countries, U.S.A. Ranks $25^{\text {th }}$ in Math



## U.S.A. Ranks $24^{\text {th }}$ Out of 29 OECD Countries in Problem-Solving <br> 2003 PISA

600


# Only place we rank high? 

## Inequality.

## PISA 2003: Gaps in Performance Of U.S. 15 Year-Olds Are Among the Largest of OECD Countries

|  | Rank in Performance <br> Gaps Between Highest <br> and Lowest Achieving <br> Students * |
| :--- | :---: |
| Mathematical Literacy | $\mathbf{8}^{\text {th }}$ |
| Problem Solving | $\mathbf{6}^{\text {th }}$ |

*Of 29 OECD countries, based on scores of students at the $5^{\text {th }}$ and $95^{\text {th }}$ percentiles.

Among OECD Countries, U.S.A. has the $4^{\text {th }}$ Largest Gap Between High-SES and Low-SES Students


Among OECD Countries, U.S.A. has the $5^{\text {th }}$ Largest Gap Between High-SES and Low-SES Students


# These gaps begin before children arrive at the schoolhouse door. 

But, rather than organizing our educational system to ameliorate this problem, we organize it to exacerbate the problem.

## How?

## By giving students who arrive with less, less in school, too.

## Some of these "lesses" are a result of choices that policymakers make.

# National Inequities in State and Local Revenue Per Student 

|  | Gap |
| :--- | :---: |
| High Poverty vs. | $\mathbf{- \$ 7 7 3}$ |
| Low Poverty Districts | per student |
| High Minority vs. | $\mathbf{- \$ 1 , 1 2 2}$ |
| Low Minority Districts | per student |

In truth, though, some of the most devastating "lesses" are a function of choices that we educators make.

## Choices we make about what to expect of whom...



## Students in Poor Schools Receive 'A's

 for Work That Would Earn 'Cs' in Affluent Schools
$\square$ Low-poverty schools ■ High-poverty schools
Source: Prospects (ABT Associates, 1993), in "Prospects: Final Report on Student Outcomes", PES, DOE, 1997.

## Choices we make about what to teach whom...

## African American, Latino \& Native American high school graduates are less likely to have been enrolled in a full college prep track



Full College Prep track is defined as at least: 4 years of English, 3 years of math, 2 years of natural science, 2 years of social science and 2 years of foreign language

## And choices we make about who teaches whom...

## More Classes in High-Poverty, High-Minority Schools Taught By Out-of-Field Teachers



Note: High Poverty school-50\% or more of the students are eligible for free/reduced price lunch. Low-poverty school $-15 \%$ or fewer of the students are eligible for free/reduced price lunch.

High-minority school - 50\% or more of the students are nonwhite. Low-minority school- $15 \%$ or fewer of the students are nonwhite.

## Poor and Minority Students Get More Inexperienced* Teachers



Note: High poverty refers to the top quartile of schools with students eligible for free/reduced price lunch. Low povertybottom quartile of schools with students eligible for free/reduced price lunch. High minority-top quartile; those schools with the highest concentrations of minority students. Low minority-bottom quartile of schools with the lowest concentrations of minority students

Tennessee: High poverty/high minority schools have fewer of the "most effective" teachers and more "least effective" teachers


# Results are devastating. 

## Kids who come in a little behind, leave a lot behind.

African American and Latino
17 Year-Olds Do Math at Same Levels As White 13 Year-Olds

$\rightarrow$ White 13 Year-Olds $\quad$-African American 17 Year-Olds $\quad$ Latino 17-Year Olds

## Note: Long-Term Trends NAEP

Source: National Center for Education Statistics, NAEP 2004 Trends in Academic Progress ${ }_{\text {IHE }}$ EDUCATION TRUST

## African American and Latino 17 Year-Olds Read at Same Levels As White 13 Year-Olds


$\sim$ White 13 Year-Olds $\_$African American 17 Year-Olds $\_$Latino 17 Year-Olds

## Note: Long-Term Trends NAEP

Source: National Center for Education Statistics, NAEP 2004 Trends in Academic Progress ${ }_{\text {IHE }}$ EDUCATION TRUST

And these are the students who remain in school through $12^{\text {th }}$ grade.

Add those all up and throw in college entry and graduation, and...


## 25-29 Year Olds with B.A. or Higher

 2010

Sourca: Pestsecondery Edocation Opporturity, "Bachelor's Dogree Athaiement by Age 24 by Fanily income CuartBen, 1970 to 2008

## B.A. Rate by Age 24

## 2009

# What Can We Do? 

An awful lot of Americans have decided that we can't do much.

## What We Hear Many Adults Say:

- They're poor
- Their parents don't care
- They come to schools without breakfast
- Not enough books
- Not enough parents


# But if they are right, why are lowincome students and students of color performing so much higher in some schools... 

## Frankford Elementary School



## Frankford Elementary Frankford, Delaware

- 449 Students in Grades PreK-5
- 29\% African American
- 34\% Latino
- 34\% White
- 76\% Low-Income


## Frankford Elementary Closing Gaps, Grade 5 Reading



Source: Delaware Department of Education, DSTP Online Reports,

## Frankford Elementary Closing Gaps, Grade 5 Math



2005

Frankford Elementary Higher Proficiency Rates than the State, 2005 Grade 3 Reading


## Frankford Elementary Higher Proficiency Rates than the State, 2005 Grade 3 Math



Source: Delaware Department of Education, DSTP Online Reports, http://dstp.doe.k12.de.us/DSTPmart/default.asp

## George Hall Elementary School

Mobile, AL

- 530 Students
- 100\% African American
- 99\% Low-Income

Four years ago, school was lowest performing in the district and among the bottom few in the state. District reconstituted-and restaffed.

## George Hall Elementary, Grade 5 Math 2008



## George Hall Elementary, Grade 5 Reading 2008



## Exceeding Standards at George Hall



## Halle Hewetson Elementary School Las Vegas, NV

- 962 students in grades PK - 5
- 85\% Latino
- 7\% African American
- 100\% Low Income
- 71\% Limited English

Proficient


## Big Improvement at Halle Hewetson Elementary

Latino Students - Grade 3 Reading


## High Performance Across Groups at Halle Hewetson Elementary




## Elmont Memorial Junior-Senior High Elmont, New York

- 1,945 students in grades 7-12
- 77\% African American
- 27\% Low-Income



## Elmont: Out-Performing the State Secondary-Level English (2006)



## Improvement and High Performance at Elmont Memorial Junior-Senior High



## More Students Graduate at Elmont Memorial Junior-Senior High




## Available at Harvard Education Press (www.hepg.org) or Amazon.com



URGENT LESSONS FROM UNEXPECTED SCHOOLS


Karin Chenoweth

Very big differences at district level, too-even in the performance of the "same" group of students.

## Low-Income African American Students do Better in Some Districts

 (NAEP Reading 4th 2003)

* There is a 19 point gap between Poor African American $4^{\text {th }}$ graders in the District of Columbia and Boston (roughly equivalent to 2 years' worth of learning)


## Low-Income African American Students do Better in Some Districts (NAEP Math 8th 2003)



* There is a 28 point gap between Poor African American $8^{\text {th }}$ graders in Los Angeles and Houston (roughly equivalent to 3 years' worth of learning)


# Bottom line: <br> At every level of education, what we do matters. 

Nevada

## Scale Scores by State - All Students



## Scale Scores by State - Latino Students



## Scale Scores by State - African-American Students

Grade 4 - NAEP Reading (2011)


## Scale Scores by State - White Students



## Scale Scores by State - Low-Income Students



## Scale Scores by State - Higher Income Students



## Scale Scores by State - All Students



## Scale Scores by State - Latino Students

Grade 8 - NAEP Math (2011)


## Scale Scores by State - African-American Students

Grade 8 - NAEP Math (2011)


## Scale Scores by State - White Students



## Scale Scores by State - Low-Income Students

Grade 8 - NAEP Math (2011)


## Scale Scores by State - Higher Income Students



## What Do We Know About How To Accelerate Success?

What do the high performers do?

## \#1. They focus on what they can do, rather than what they

 can't.
# " Some of our children live in pretty dire circumstances. But we can't dwell on that, because we can't change it. So when we come here, we have to dwell on that which is going to move our kids." 

Barbara Adderly, Principal,
M. Hall Stanton Elementary, Philadelphia
"When asked what can be done to solve the achievement problem, some adults just point out the schoolhouse window. But we're not look out the window educators here: we're look in the mirror folks."
--Adelaide Flamer DCPS

## \#2. They don't leave anything about teaching and learning to chance.

An awful lot of our teachers-even brand new ones-are left to figure out on their own what to teach and what constitutes "good enough" work.

## 'A' Work in Poor Schools Would Earn 'Cs' in Affluent Schools



Source: Prospects (ABT Associates, 1993), in "Prospects: Final Report on Student Outcomes", PES, DOE, 1997.

# Students can do no better than the assignments they are given... 

## Grade 10 Writing Assignment

A frequent theme in literature is the conflict between the individual and society. From literature you have read, select a character who struggled with society. In a well-developed essay, identify the character and explain why this character's conflict with society is important.

## Grade 10 Writing Assignment

Write a composition of at least 4 paragraphs on Martin Luther King's most important contribution to this society. Illustrate your work with a neat cover page. Neatness counts.

## Grade 7 Writing Assignment

## Essay on Anne Frank

Your essay will consist of an opening paragraph which introduced the title, author and general background of the novel.

Your thesis will state specifically what Anne's overall personality is, and what general psychological and intellectual changes she exhibits over the course of the book

You might organize your essay by grouping psychological and intellectual changes OR you might choose 3 or 4 characteristics (like friendliness, patience, optimism, self doubt) and show how she changes in this area.

## Grade 7 Writing Assignment



# -My Best Friend: 

-A chore I hate:

- A car I want:
- My heartthrob:

Source: Unnamed school district in California, 2002-03 school year.

## High Performing Schools and Districts

- Have clear and specific goals for what students should learn in every grade, including the order in which they should learn it
- Provide teachers with common curriculum, assignments
- Have regular vehicle to assure common marking standards
- Assess students every 4-8 weeks to measure progress
- Act immediately on the results of those assessments


# In other words, they strive for consistency in everything they do. 

And they bring that consistency to school discipline, as well.

## \#3. They set their goals high.

## Elementary Version...

## M. Hall Stanton Elementary: Percent of $5^{\text {th }}$ Graders ADVANCED



## High School Version...

# Even when they start with high drop out rates, high impact high schools focus on preparing all kids for college and careers 

Education Trust 2005 study, "Gaining Traction, Gaining Ground."
\#4. Higher performing secondary schools put all kids-not just some-in a demanding high school core curriculum.

Single biggest predictor post-high school success is QUALITY AND INTENSITY OF HIGH SCHOOL CURRICULUM

Cliff Adelman, Answers in the Tool Box, U.S. Department of Education.

## College prep curriculum has benefits far beyond college.

## Students of all sorts will learn more...

## Low Quartile Students Gain More From College Prep Courses*



Vocational College Prep
*Grade 8-grade 12 test score gains based on 8th grade achievement.
Source: USDOE, NCES, Vocational Education in the United States: Toward the Year 2000, in Issue Brief:
Students Who Prepare for College and Vocation

## They will also fail less often...

Challenging Curriculum Results in Lower Failure Rates, Even for Lowest Achievers

## Ninth-grade English performance, by high/low level course, and eighth-grade reading achievement quartiles



Source: SREB, "Middle Grades to High School: Mending a Weak Link". Unpublished Draft, 2002.

## And they'll be better prepared for the workplace.

# Leading states, districts making college prep the default curriculum. 

Texas, Indiana, Arkansas, Michigan, Oklahoma, Kentucky, Kansas.
\#5. Principals are hugely important, ever present, but NOT
the only leaders in the school

## Elmont Memorial Junior-Senior High School



## High performing schools...

- Teachers regularly observe other teachers;
- Teachers have time to plan and work collaboratively;
- New teachers get generous and careful support and acculturation;
- Teachers take on many other leadership tasks at the school


## \#6. Good schools know how much teachers matter, and they act on that knowledge.

## 10 Percentile Point Average Difference for Students who have Top and Bottom QuartileTeachers

Figure 2. Teacher Impacts on Math Performance in Third Year By Ranking after First Two Years


Note: Classroom-level impacts on average student pertormarce, controling for baseline scores, student demographics, and program participation. LAUSD elementary teachers, < 4 years' experience.

Source: Gordon, R., Kane, T.J., and Staiger, D.O. (2006). Identifying Effective teachers Using Performance on the Job. Washington, D.C.: The Brookings Institution.
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## Students in Dallas Gain More in Math with Effective Teachers: One Year Growth From $3^{\text {rd }}-4{ }^{\text {th }}$ Grade



## Cumulative Teacher Effects On Students' Math Scores in Dallas (Grades 3-5)



## So, there are VERY BIG differences among our teachers.

## BUT...

We pretend that there aren't.

## The Widget Effect

"When it comes to measuring instructional performance, current policies and systems overlook significant differences between teachers. There is little or no differentiation of excellent teaching from good, good from fair, or fair from poor. This is the Widget Effect: a tendency to treat all teachers as roughly interchangeable, even when their teaching is quite variable. Consequently, teachers are not developed as professionals with individual strengths and capabilities, and poor performance is rarely identified or addressed."

- The New Teacher Project, 2009

In districts that use a two-rating teacher performance evaluation system-most commonly "satisfactory" or "unsatisfactory"-the "unsatisfactory" rating is rarely used.

| Site | S <br> Number of Satisfactory <br> Evaluation Ratings <br> SY03-04-SY07-08 | Number of Unsatisfactory <br> Evaluation Ratings <br> SY03-04-SY07-08 |
| :--- | :---: | :---: |
| Denver ${ }^{3}$ | 2,676 | $22(0.8 \%)$ |
| Jonesboro $^{4}$ | 246 | $0(0 \%)$ |
| Pueblo ${ }^{5}$ | 1,284 | $2(0.2 \%)$ |
| Toledo $^{6}$ | 1,768 | $3(0.2 \%)$ |

## All data fortenured/nom-probationary teachers

1 Source: District extant data supplied between April 2008 and March 2009 2 Source: District extant data supplied between April 2008 and March 200 3 Number evaluation ratings assigned between SY $2003-04$ to $5 \mathrm{Y} 2007-08$
4 Number of evaluation ratings assigned between SY 2003 -04 to SY $2005-06$
5 Number of evaluation ratings assigned between SY 2005-06 to SY 2007 -08
6 Number of evaluation ratings assigned between SY $2005-06$ to SY $2007-08$

Districts that use multiple evaluation ratings-three or more ratingsregularly award teachers the highest evaluation ratings.

Estimated percent of tenured/non-probationary teachers who received one of the top two highest performance evaluation ratings for evaluations conducted in SY 2007-08.

$98 \%$
Rockford
(Based on a 3-Rating Scale)

Source: District evaluation data supplied by Cincinnati Public Schools and Rockford Public Schools human resources departments from October 2008 to March 2009.

So, we paper over the differences among our teachers AND...we continue to assign our weakest to the kids who need the strongest.

## Math Classes at High-Poverty and High- Minority Schools More Likely to be Taught by Out of Field* Teachers



Note: High Poverty school-75\% or more of the students are eligible for free/reduced price lunch. Low-poverty school - $15 \%$ or fewer of the students are eligible for free/reduced price lunch. High minority school-75\% or more of the students are Black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander. Low-minority school -10\% or fewer of the students are non-White students.

[^0]
## Students at High-Minority Schools More Likely to Be Taught By Novice* Teachers



Note: High minority school-75\% or more of the students are Black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander. Low-minority school -10\% or fewer of the students are non-White students.

Tennessee: High poverty/high minority schools have fewer of the "most effective" teachers and more "least effective" teachers


## Low-Achieving Students are More Likely to be Assigned to Ineffective Teachers than Effective Teachers



## High performing schools and districts...

- Work hard to attract and hold good teachers
- Make sure that their best are assigned to the students who most need them
- Chase out teachers who are not "good enough" for their kids.


# Best example in the country right now? 

Charlotte-Mecklenburg's
"Strategic Staffing Initiative"

# All in all, not a very long list. 

Mostly just common sense.

# But as school board members, you can prompt action on these things by the questions you ask. 

## Accelerating Progress: <br> Nine Questions for School Board Members to Ask

## Nine Questions for School Board Members

 to Ask1. How are we assuring consistency in the rigor of the assignments our students get?
2. Are our teachers getting the feedback and support they need to grow? Are our strongest (and weakest) teachers fairly distributed?
3. Do we have a pipeline of strong leaders?
4. Are we aiming high for everybody's children?
5. Do all of our students complete the curriculum that will enable them to choose post-high school paths-or are we choosing for them?
6. Are participation rates in advanced options equal?
7. How do we provide supports for struggling students?
8. How many of our students are chronically absent? What are we doing about that?
9. Are parents partners...or the excuse we use when things aren't going well?

# Asking some of those questions won't win you any popularity contest. 

Indeed, it will take some courage to ask-and to insist on honest answers.

# But doing so is hugely important to the future of your communities and our country. 

# At the moment, our country is on a dangerous path. 

## America: Two Enduring Stories

# 1. Land of Opportunity: 

Work hard, and you can become anything you want to be.

# 2. Generational Advancement: 

Through hard work and sacrifice, each generation of parents will be able to assure a better life-and better education-for their children.

## Powerful

## Pervasive

## Wrong

## U.S. has the fourth-highest income inequality among OECD nations



Note: Gini coefficient ranges from 0 to 1 , where 0 indicates total income equality and 1 indicates total income inequality
Source: United Nations, UNdata, http://data.un.org/DocumentData.aspx?q=gini\&id=230

## For people of color, the past four years have brought an economic Tsunami.

## Real Median Annual Income

|  | 2007 | 2011 | Percent <br> Change |
| :--- | :--- | :--- | :--- |
| Black Head <br> of Household | 35,072 | 31,784 | $-9.4 \%$ |
| Hispanic <br> Head of <br> Household | 41,945 | 39,901 | $-4.9 \%$ |
| White Head <br> of Household | 59,111 | 56,320 | $-4.7 \%$ |

## 2010 Poverty Rates

## Black <br> 27\% <br> Latino <br> 26\% <br> Asian <br> 12.1\% White <br> 9.9\%

## Change in Median Wealth, 2005-2009

Hispanic Households Down 66\%
Black Households Down 53\%
Asian Households Down 54\%
White Households Down 16\%

## Median Wealth of White Families

## 20 X that of African Americans

18 that of Latinos

## Not just wages, but mobility as well.

## The US now has one of lowest rates of intergenerational mobility

Cross-country examples of the link between father and son wages


## US intergenerational mobility was increasing until 1980, and has sharply declined since

The falling elasticity meant increased economic mobility until 1980. Since then, the elasticity has risen and mobility has slowed


## What does that mean?

That we have essentially hollowed out the middle class, and are fast becoming a country where those at the top stay at the top and those at the bottom stay there, too.

# At macro level, better and more equal education is not the only answer. 

But at the individual level, it really is.

What WE do, in other words, is hugely important to returning
this country to the principles on which it was founded.












## Preserving our freedoms as

Americans has required courage, tenacity and a high level of skill from generations of soldiers.

Today, it requires those same things of us.

## Download this presentation and learn more about our annual conference!

## www.edtrust.org




[^0]:    *Teachers with neither certification nor major. Data for secondary-level core academic classes (Math, Science, Social Studies, English) across USA. Source: Analysis of 2003-2004 Schools and Staffing Survey data by Richard Ingersoll, University of Pennsylvania 2007.0 2011 THE EDUCATION TRUST

